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Report of the technical review of the first biennial report of Estonia

Developed country Parties are requested, in accordance with decision 2/CP.17, to submit their first biennial report to the secretariat by 1 January 2014. This report presents the results of the technical review of the first biennial report of Estonia conducted by an expert review team in accordance with the "Guidelines for the technical review of information reported under the Convention related to greenhouse gas inventories, biennial reports and national communications by Parties included in Annex I to the Convention".

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I. Introduction and summary

A. Introduction

1. For Estonia, the Convention entered into force on 25 October 1994. Under the Convention, Estonia made a commitment to contribute to the joint European Union (EU) economy-wide target of a 20 per cent greenhouse gas (GHG) emission reduction below the 1990 level by 2020. The EU also made an offer to move to a 30 per cent reduction conditional on other developed countries committing to a comparable target and developing countries contributing adequately under a new global climate change agreement.

2. This report covers the centralized technical review of the first biennial report (BR1)[1] of Estonia, coordinated by the secretariat, in accordance with the "Guidelines for the technical review of information reported under the Convention related to greenhouse gas inventories, biennial reports and national communications by Parties included in Annex I to the Convention" (decision 23/CP.19).

3. The review took place from 5 to 10 May 2014 in Bonn, Germany, and was conducted by the following team of nominated experts from the UNFCCC roster of experts: Ms. Eglantina Bruci (Albania), Mr. Oyvind Christophersen (Norway), Mr. Sorin Deaconu (Romania), Ms. Agnieszka Maria Janowska (Poland), Mr. Robert Jeszke (Poland), Mr. Bundit Limmeechokchai (Thailand), Ms. Jenny Mager (Chile), Mr. Erick Wamalwa Masafu (Kenya), Mr. Alexander Storch (Austria), Mr. Daniel Tutu Benefoh (Ghana), Mr. Goran Vukmir (Bosnia and Herzegovina) and Mr. Pavel Zámyslický (Czech Republic). Ms. Janowska and Mr. Tutu Benefoh were the lead reviewers. The review was coordinated by Mr. Matthew Dudley and Ms. Barbara Muik (secretariat).

4. During the review, the expert review team (ERT) reviewed each section of the BR1.

5. In accordance with decision 23/CP.19, a draft version of this report was communicated to the Government of Estonia, which provided comments that were considered and incorporated, as appropriate, into this final version of the report.

B. Summary

6. The ERT conducted a technical review of the information reported in the BR1 of Estonia according to the "UNFCCC biennial reporting guidelines for developed country Parties" (hereinafter referred to as the UNFCCC reporting guidelines).

7. During the review, Estonia provided further relevant information, for example, elaborating on policies and measures (PaMs) by sector and by gas, clarifying data reported in the common tabular format (CTF) tables, and on projection assumptions.

1. Completeness and transparency of reporting

8. Gaps and issues related to the reported information identified by the ERT are presented in table 1 below.

[1] The biennial report submission comprises the text of the report and the common tabular format (CTF) tables. Both the text and the CTF tables have been subject to the technical review.

2. Timeliness

9. The BR1 was submitted on 31 December 2013, before the deadline of 1 January 2014 mandated by decision 2/CP.17. A revised version was submitted by Estonia on 13 February 2014 and was used as the basis for the review. The CTF tables were submitted on the same dates.

3. Adherence to the reporting guidelines

10. The information reported by Estonia in its BR1 is mostly in adherence to the UNFCCC reporting guidelines on BRs as per decision 2/CP.17 (see table 1).

Table 1

Summary of completeness and transparency issues of reported information in the first biennial report of Estonia[a]

Sections of the biennial report	*Completeness*	*Transparency*	*Reference to paragraphs*
Greenhouse gas emissions and trends	Complete	Transparent	
Assumptions, conditions and methodologies related to the attainment of the quantified economy-wide emission reduction target	Complete	Mostly transparent	18
Progress in achievement of targets	Mostly complete	Mostly transparent	21, 23, 40, 45
Projections	Complete	Transparent	
Provision of support to developing country Parties[b]	NA	NA	

Abbreviation: NA = not applicable.

[a] A list of recommendations pertaining to the completeness and transparency issues identified in this table is included in the chapter on conclusions and recommendations.

[b] Estonia is not a Party included in Annex II to the Convention and is therefore not obliged to adopt measures and fulfil obligations as defined in Article 4, paragraphs 3, 4 and 5, of the Convention.

II. Technical review of the reported information

A. All greenhouse gas emissions and removals related to the quantified economy-wide emission reduction target

11. Estonia has provided a summary of information on GHG emission trends for the period 1990–2011 in its BR1 and CTF table 1. This information is consistent with the 2013 national GHG inventory submission.

12. Total GHG emissions[2] excluding emissions and removals from land use, land-use change and forestry (LULUCF) decreased by 48.3 per cent between 1990 and 2011.

[2] In this report, the term "total GHG emissions" refers to the aggregated national GHG emissions expressed in terms of carbon dioxide equivalent excluding land use, land-use change and forestry, unless otherwise specified.

whereas total GHG emissions including net emissions or removals from LULUCF decreased by 47.3 per cent over the same period. The decrease in total GHG emissions between 1990 and 2011 was mainly attributable to a decrease in carbon dioxide (CO_2) emissions by 48.6 per cent, a decrease of methane (CH_4) emissions by 42.8 per cent and a decrease of nitrous oxide (N_2O) emissions by 55.1 per cent. Emissions of fluorinated gases (F-gases) accounted for about 0.0 per cent of total GHG emissions in 1990 and 0.8 per cent in 2011.

13. Further information on the review of emission and emission trends is provided in chapter II.A of the report of the technical review of the sixth national communication (IDR/NC6).

B. Assumptions, conditions and methodologies related to the attainment of the quantified economy-wide emission reduction target

14. Under the Convention, Estonia contributes to the European Union (EU) quantified economy-wide target to achieve a 20 per cent reduction of emissions by 2020 compared with the 1990 (base year) level. The target for the EU and its member States is formalized in the EU's climate and energy package legislation. This includes the European Union Emissions Trading System (EU ETS) and the European Union effort-sharing decision (ESD). This legislative package regulates the emissions of CO_2, CH_4, N_2O, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF_6) and nitrogen trifluoride (NF_3) using global warming potential (GWP) values from the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) to aggregate EU GHG emissions up to 2020.

15. The regulation of the emissions covered by the EU ETS entered into force on 1 January 2005, and the new period started in 2013 based on a yearly reduction equal to 1.74 per cent of the average allocation in the period 2008–2012, extrapolated starting in 2010, leading to a 21 per cent GHG emissions reduction by 2020 compared with the 2005 level. Emissions of sectors not covered by the EU ETS are regulated by member State specific targets starting in 2013, based on average emissions from 2008 to 2010 and on the gross domestic product (GDP), which leads to a collective reduction by all the member States of about 10 per cent by 2020 compared with 2005 at the EU level. In accordance with the EU ESD, the country-specific target for Estonia is to limit emission growth to 11 per cent above the 2005 level by 2020.

16. The EU also made an offer to move to a 30 per cent reduction conditional on other developed countries committing to a comparable target and developing countries contributing adequately under a new global climate change agreement.

17. In its BR1 and CTF table 2, Estonia reported a description of its target referred to in paragraph 14 above, including associated conditions and assumptions. In line with the EU target, Estonia does not include emissions or removals from the LULUCF sector in defining its quantified economy-wide target. In CTF table 2(b), the base year for HFCs, PFCs and SF_6 is reported as 1990, with a base year for NF_3 to be determined.

18. The ERT recommends Estonia improve the transparency of reporting with regard to assumptions and methodologies underlying its economy-wide emission reduction target by providing all information required in the CTF tables.

19. The ERT concluded that Estonia's reporting on assumptions and methodologies related to the attainment of the target is in accordance with the UNFCCC reporting guidelines, and that the strategy derived from the emissions situation in Estonia is well planned and adequate.

C. Progress made towards the achievement of the quantified economy-wide emission reduction target

20. In its BR1 and CTF tables 3 and 4, Estonia reported information on its mitigation actions implemented and planned since its fifth national communication to achieve its target. Estonia also reported on the use of units from market-based mechanisms and LULUCF to achieve its target.

21. Estonia's BR1 is complete in relation to PaMs. However, due the inconsistency of its structure, the reported information is not fully transparent, especially with regard to the information required to be reported on PaMs, such as the implementing entity and status of implementation, and reporting on PaMs by sector and by gas.

22. During the review, Estonia provided additional information, elaborating on mitigating actions by sector and by gas and explaining the differences, of which there are several, between the PaMs reported in the NC6 and those in the BR1, especially with regard to the mitigation effects of some PaMs.

23. The ERT recommends that Estonia further improve the transparency of its reporting on PaMs by ensuring that the reported information clearly indicates the key PaMs and their contribution to the fulfilment of the economy-wide target.

24. The ERT reviewed the reported information and provided its assessment of progress made towards achieving the target under the Convention. The ERT noted the progress made by Estonia, reported in its BR1. Estonia has implemented PaMs that target all relevant sectors and GHGs. The ERT noted that Estonia's emissions excluding LULUCF decreased by 48.3 per cent between 1990 and 2011. Across the EU, it is expected that the use of the market mechanism under the EU ETS will guarantee that emissions from sectors falling under this scheme (mainly large point sources such as power plants and industrial facilities) will achieve the 2020 target. In accordance with the EU ESD, the country-specific target for Estonia is to limit emission growth to 11 per cent above the 2005 level by 2020. In the 'with measures' scenario, the projected total emissions (including both EU ETS and non-EU ETS sectors) are 7.7 per cent below the 2005 level by 2020, and in the 'with additional measures' scenario, the projected emissions are 10.4 per cent below the 2005 level by 2020. Based on these figures, the ERT can safely note that Estonia is on track to meet its 2020 target under the EU ESD.

1. Mitigation actions and their effects

25. Estonia has provided in its BR1 comprehensive and well-organized information on its package of mitigation actions introduced to achieve its target. The BR1 provided information on mitigation actions organized by sector and by gas. A detailed review of the reported information is provided in chapter II.B of the IDR/NC6. In CTF table 3, the measures were described well and information about the objectives was also provided. The estimated mitigation effects of PaMs were quantified.

26. The key framework climate and energy policy is anchored in the National Strategy on Sustainable Development – Sustainable Estonia 21, and also in several other general and sectoral documents. Sustainable Estonia 21 aims to integrate economic factors with the principles of sustainable development by 2030. The National Reform Programme Estonia 2020 endorses two major priorities for the Government of Estonia in transitioning to an environmentally sustainable economy and energy sector: (1) implementation of long-term structural changes in the energy sector in line with Estonia's energy security and energy efficiency objectives; and (2) reduction in resource intensity, including the energy intensity of the economy, by improved energy efficiency. Each of these elements is in line with the Europe 2020 Strategy of the EU.

27. The majority of Estonia's strategies are anchored in or linked to EU policy. As an EU member State, Estonia is required to implement EU climate policy by 2020, the objective of which is a 20 per cent reduction in GHGs by 2020 compared with 1990 levels. In this regard, the EU Emissions Trading Directive (2003/87/EC) and the Effort Sharing Decision (406/2009/EC) regulating GHG emission reduction in sectors outside the EU ETS (transport, buildings, agriculture and waste) are key policies.

28. The National Renewable Energy Action Plan to 2020 includes domestic measures to reach the target of a 25 per cent share of renewable energy sources (RES) in total energy consumption established for Estonia under the Renewable Energy Directive (2009/28/EC). The National Energy Efficiency Plan (2007–2013), which was one of the documents prepared under the National Long-term Development Plan for the Fuel and Energy Sector by 2015, takes into account the indicative energy conservation objectives set under the Energy End-use Efficiency and Energy Services Directive (2006/32/EC); that is, reducing final energy consumption by 9 per cent in the period 2008–2016.

29. Since 2005, Estonia has participated in the EU ETS, which is a market-based mechanism aimed at reducing GHG emissions in the energy and the industrial sectors, and is also a key instrument to achieving the EU climate objectives. Estonia's first national allocation plan, for the EU ETS period 2005–2007, allowed Estonian installations to emit 56.7 Mt carbon dioxide equivalent (CO_2 eq). The national allocation plan for the second period (2008–2012) allocated allowances amounting to 66.51 Mt CO_2 eq. In the third EU ETS period (2013–2020), there will be no national allocation plans; instead, the allocation of allowances will be through an auction process. However, some free allocations are permissible: for 2013–2020, Estonia is permitted to allocate free allowances amounting to 18 Mt CO_2 eq. Estonia has decided to use these in its energy sector.

30. Estonia's GHG mitigation policies concern all sectors; however, priority is given to the energy sector, which is responsible for the majority of GHG emissions (almost 90 per cent in 2011). Because in Estonia oil shale is the main domestic fuel, the National Development Plan for the Use of Oil Shale (2008–2015) was developed in order to ensure application of economic, security and environmental considerations in the use of this fuel. On the basis of this plan, a limit on the annual amount of oil shale mined was set at 20 Mt per year, and this limit is included in the Earth's Crust Act (October 2008). The use of environmentally sound technologies in oil shale-based power development and production is an issue of growing importance in Estonia.

31. Modernization of power plants is under way in Estonia and will lead to a decrease in carbon dioxide intensity of electricity production from about 1.2 t CO_2 eq per MWh eq to about 0.9 t CO_2 eq per MWh eq. Measures addressing the improvement of efficiency in oil shale use are expected to deliver a decrease in GHG emissions of 507.73 kt CO_2 eq by 2020. Measures addressing the transformation of the energy supply structure towards RES, especially by means of a feed-in tariff system, should deliver further reductions of 815.57 kt CO_2 eq by 2020, and support for the efficient cogeneration of heat and electricity an additional 292.45 kt CO_2 eq by 2020.

32. With regard to non-energy sectors, the biggest savings are expected in agriculture owing to modernization of agricultural holdings (127.99 kt CO_2 eq by 2020) and support for organic farming (128.77 kt CO_2 eq by 2020).

33. The ERT notes Estonia's efforts to implement PaMs and estimate their mitigation effects. Taking into account the fact that reaching Estonia's 2020 target depends mostly on GHG limitations in sectors outside the EU ETS, the ERT encourages Estonia to strengthen its PaMs addressing such sectors (e.g. transport, agriculture, buildings and waste). In addition, the ERT notes that as the energy sector is responsible for about 90 per cent of total

GHG emissions in Estonia, implementation of mitigation measures in this sector and close monitoring of their effects is of crucial importance.

34. Table 2 provides a concise summary of the key mitigation actions implemented by Estonia to achieve its target.

Table 2
Summary of information on mitigation actions reported by Estonia

Sectors affected	*List of key policies and measures*	*Estimate of mitigation impact (kt CO_2 eq)*
Policy framework and cross-sectoral measures		
	European Union Emissions Trading System	NE
	Effort Sharing Decision	NE
	National Strategy on Sustainable Development – Sustainable Estonia 21	NE
	National Environmental Strategy to 2030	NE
	National Reform Programme (Estonia 2020)	NE
	Ambient Air Protection Act	NE
Energy	National Development Plan for the Energy Sector to 2020	NE
Energy supply	The National Development Plan for the Electricity Sector to 2018	NE
	National Development Plan for the Use of Oil Shale (2008–2015)	NE[a]
	Improvement of efficiency in the use of oil shale	1 252.34
Renewable energy	National Renewable Energy Action Plan to 2020	NE[a]
	Transformation of the energy supply structure towards renewable energy sources	815.57
	Support for efficient cogeneration of heat and electricity	292.45
Energy efficiency	Second National Energy Efficiency Action Plan	NE
Residential and commercial sectors	Improvement of energy efficiency and increase in use of renewable energy sources in small boiler houses and improvement of district heating	156.56
	Promotion of the use of energy-efficient electrical appliances	153.14
	Investment support and grants for energy-efficient renovation of residential buildings	28.00
	Investment support for energy-efficient renovation of public buildings	27.29
Transport	The Transport Development Plan (2006–2013)	NE[a]
	The Transport Development Plan (2014–2020)	NE[a]
	Introduction of regulation for the use of biofuels	235.42

	Promotion of public transport	21.37
Industrial sectors	Improvement of energy efficiency in manufacturing industries and construction	332.12
	Fluorinated gas (F-gas) regulation	NE
Agriculture	Modernization of agriculture holdings and investments in bioenergy production	127.99
	Support for organic farming	128.77
Forestry	Forest Act and Forestry Plan	NE
Waste management	The National Waste Management Plan (2008–2013)	NE[a]
	Prohibition concerning percentage of biodegradable waste deposited in landfills	144.98

Note: The greenhouse gas reduction estimates, given for some measures are reductions in carbon dioxide or carbon dioxide equivalent for 2020.

Abbreviation: NE = not estimated.

[a] The total impact on GHG emissions of the specific plan was not provided by Estonia in its NC6. However, many measures that are being implemented are implemented under the specific plan and their specific GHG mitigation impact is reported in the NC6.

35. In its BR1, Estonia provided information on changes in its domestic institutional arrangements, including institutional, legal, administrative and procedural arrangements used for domestic compliance, monitoring, reporting, archiving of information and evaluation of the progress towards its target.

36. The Ministry of the Environment is the highest executive body responsible for the implementation of environmental policy, including climate issues, which are under the responsibility of the Ministry's Climate and Radiation Department. Responsibilities for some climate issues fall under other ministries such as the Ministry of Economic Affairs and Communications (for energy matters), the Ministry of Agriculture and the Ministry of Finance. However, the Ministry of the Environment is predominantly in charge of coordination between different institutions on climate change matters.

37. Monitoring and evaluation of adopted PaMs is usually performed by the institution that is responsible for implementation of the policy or measure. The PaMs and their effects are evaluated and verified on a biennial basis in line with EU requirements under Regulation No. 525/2013. This regulation also introduced more stringent requirements for national arrangements, including for tracking progress towards economy-wide targets. The Ministry of the Environment is responsible for the implementation of EU climate change related regulations in Estonia. The Ministry keeps a record of the reports submitted to the UNFCCC and evaluates the progress towards the emission reduction targets.

38. Estonia reported that in 2009 an energy and climate agency subordinated by the Ministry of Economic Affairs and Communications was established and made responsible for analysis of climate and energy activities and promotion of sustainable development. In 2011 the responsibilities of this agency were transferred to a financing institution, KredEx, which is under the supervision of the same ministry. In 2013, the Estonian Environment Agency was established by merging the functions of the Estonian Environment Information Centre and the Estonian Meteorological and Hydrological Institute.

39. The ERT notes the information reported by Estonia and encourages Estonia to enhance its reporting on its institutional arrangements, especially in the area of progress assessment, so that the progress towards its economy-wide target can be properly assessed.

The ERT also encourages Estonia to report in more detail how the effects of actions are monitored over time and by whom in its next biennial report (BR).

40. The ERT commends Estonia on its complete reporting with regard to PaMs. However, the ERT recommends Estonia further improve transparency of the reported information by using a clear structure for the PaMs section and covering all mandatory sectors, subdivided by gas.

41. Estonia did not provide information on the assessment of the economic and social consequences of response measures. In order to improve completeness of reporting, the ERT encourages Estonia to report on those issues in its next BR.

2. Estimates of emission reductions and removals and the use of units from the market-based mechanisms and land use, land-use change and forestry

42. Estonia reported in its BR1 and CTF table 4 on its plans to use market-based mechanisms under the Convention and other mechanisms. CTF tables 4(a)I, 4(a)II and 4(b) are complete and are explained in the BR1. Table 3 illustrates how Estonia reported on the use of units from market-based mechanisms and LULUCF to achieve its target in the BR1, CTF tables and during the review.

Table 3

Summary information on the use of units from the market-based mechanisms and land use, land-use change and forestry as part of the reporting on the progress made towards achievement of the target by Estonia

Year	*Emissions excluding LULUCF (kt CO_2 eq)*[a]	*LULUCF[b] emissions removals (kt CO_2 eq)*	*Emissions including LULUCF (kt CO_2 eq)*	*Use of units from the market-based mechanisms[c] (kt CO_2 eq)*
1990	40 542.14	NA	NA	0
2010	19 988.77	NA	NA	0
2011	20 955.58	NA	NA	0

Abbreviations: LULUCF = land use, land-use change and forestry, NA = not applicable.

[a] Source: Biennial report, common tabular format table 1.

[b] The unconditional commitment of the European Union (EU) to reduce greenhouse gas emissions by 20 per cent by 2020 compared with 1990 does not include emissions/removals from LULUCF.

[c] In common tabular format table 4, Estonia reported on units for 2011 and 2012 (14,345.41 kt CO_2 eq in 2011 and 15,229.97 kt CO_2 eq in 2012. The reported units correspond to 'retirement units' reported in Standard Electronic Format table 5(c).

3. Projections

43. Estonia has provided in its BR1 and CTF tables 5 and 6 well-organized information on its updated projections for 2020 and 2030. A detailed review of the reported information is provided in chapter II.C of the IDR/NC6.

44. In its BR1, Estonia provided information on the changes since the previous NC in the methodologies used for the preparation of projections. Changes regarding assumptions and models are reported well, especially for the energy sector. Estonia provided comprehensive reporting in its BR1 as well as useful additional information to the ERT during the review.

45. During the review, Estonia provided additional information, elaborating on: the LULUCF accounting approach; missing content in CTF table 2(e)I and CTF table 2(e)II;

different emission totals in the BR1 and the NC6 for 2010 and for 2020 ('with additional measures' scenario); and the prefixes, "+" for bought and "–" for sold, for assigned amount units, emission reduction units and certified emission reductions in CTF table 4(b).

46. The ERT noted information reported by Estonia on projected emission trends by 2020 and 2030. In the 'with measures' scenario, the projected emissions are 35.2 per cent below the 1990 level by 2020, and in the 'with additional measures' scenario, the projected emissions are 35.6 per cent below the 1990 level by 2020. The projected emission reductions by 2030 under the 'with measures' and 'with additional measures' scenarios are 35.6 and 40.0 per cent, respectively, compared to the 1990 level. Across the EU, it is expected that the market mechanism of the EU ETS will guarantee that emissions from sectors falling under this scheme (mainly large point sources such as power plants and industrial facilities) will achieve the 2020 target. In accordance with the EU ESD, the country-specific target for Estonia is to limit emission growth to 11 per cent above the 2005 level by 2020 (see para. 24 above).

D. Provision of financial, technological and capacity-building support to developing country Parties

Provision of support to developing country Parties

47. Estonia is not included in Annex II to the Convention and is therefore not obliged to report on the provision of financial, technological and capacity-building support to developing country Parties. The ERT noted that Estonia did not report in its BR1 information on the provision of financial resources and capacity-building support.

III. Conclusions

48. The ERT conducted a technical review of the information reported in the BR1 and CTF tables of Estonia in accordance with the UNFCCC reporting guidelines on BRs. The ERT concludes that the BR1 and CTF tables provide a good overview of information on: emissions and removals related to the quantified economy-wide emission reduction target, a description of the target, and progress made by Estonia to achieve its target. During the review, Estonia provided additional information on PaMs and GHG projections.

49. Estonia's emissions and removals related to the target for 2011 were estimated to be 48.3 per cent below its 1990 level excluding LULUCF. Emission decreases were driven by restructuring of the economy, efficiency improvement in the use of oil shale, and energy efficiency improvement in the demand sectors.

50. Under the Convention, Estonia contributes to achieving the EU quantified economy-wide target of a 20 per cent reduction in emissions by 2020 compared with the 1990 base-year level. The target for the EU and its member States is formalized in the European Union's climate and energy package legislation. This includes the EU ETS and the EU ESD. Emissions and removals from the LULUCF sector are not included in the quantified economy-wide target.

51. The description of the economy-wide emission reduction target in BR1 and CTF tables includes information regarding the base year, gases (CO_2, CH_4, N_2O, HFCs, PFCs, SF_6 and NF_3), sectors covered (energy, transport, industrial processes, agriculture, waste and aviation) and GWP values. In CTF table 2(b), the base year for HFCs, PFCs and SF_6 is reported as 1990, with the corresponding base year for NF_3 to be determined. The ERT noted that the base year for the joint EU economy-wide emission reduction target is 1990 for all gases excluding NF_3.

52. The projected reductions in GHG emissions for 2020 are 35.2 per cent under the 'with measures' scenario and 35.6 per cent under the 'with additional measures' scenario, in relation to the 1990 level. The projected emission reductions for 2030 are 35.6 per cent under the 'with measures' scenario and 40.0 per cent under the 'with additional measures' scenario, compared to the 1990 level.

53. Estonia does not have a national quantified economy-wide emission reduction target. Emissions that fall under the EU ETS sector contribute to the EU-wide EU ETS target of a 21 per cent reduction by 2020 compared with 2005. For the non-EU ETS sector (excluding LULUCF), the national target of Estonia is to limit emission growth to 11 per cent above the 2005 level by 2020. In absolute terms, this means that Estonia has to limit emissions from non-ETS sectors from 5,627 kt CO_2 eq (2005) to 6,268.6 kt CO_2 eq in 2020. Based on these figures, the ERT can safely note that Estonia is on track to meet its 2020 target under the EU ESD.

54. Estonia reported on its PaMs adopted, implemented and planned in achieving its commitments under the Convention and its Kyoto Protocol. The implemented and adopted PaMs with the highest mitigation effect are in the energy sector and include retrofitting of power stations to ensure efficient use of oil shale, improved energy efficiency, cogeneration projects and the promotion of clean transport. The overarching document is the strategy Sustainable Estonia 21, which aims to ensure the sustainable development of Estonia. The National Programme of Greenhouse Gas Emissions for 2003–2012 was in place to ensure that Estonia delivered on its Kyoto Protocol target for the first commitment period. Estonia's key medium-term and long-term programmes and plans are derived directly from EU climate policy – the EU 2020 climate and energy package sets clear climate objectives by 2020.

55. In the course of the review, the ERT formulated several recommendations relating to the completeness and transparency of Estonia's reporting under the Convention. The key recommendations[3] are that Estonia:

(a) Improve the completeness of reporting by including in the next BR enhanced information on GHG projections, ensuring that all mandatory CTF tables are complete, especially CTF tables 2(e)I and 2(e)II;

(b) Improve the transparency of reporting by including in the next BR assumptions and methodologies underlying its economy-wide emission reduction target by providing all information required in the CTF tables.

[3] The recommendations are given in full in the relevant sections of this report.

Annex

Documents and information used during the review

A. Reference documents

"UNFCCC biennial reporting guidelines for developed country Parties". Annex to decision 2/CP.17.
Available at <http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf#page=4>.

"Guidelines for the technical review of information reported under the Convention related to greenhouse gas inventories, biennial reports and national communications by Parties included in Annex I to the Convention". Decision 23/CP.19. Available at <http://unfccc.int/resource/docs/2013/cop19/eng/10a02.pdf#page=20>.

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B. Additional information provided by the Party

Responses to questions during the review were received from Ms. Ingrid Võrno (Ministry of Environment, Tallinn), including additional material on updated policies and measures, greenhouse gas projections, the national registry and recent climate policy developments in Estonia.